## U.S. Crops

Near-term adjustments in the U.S. crops sector reflect market responses to relatively high prices that have resulted from the 2010 global wheat production shortfall (largely in Russia), reduced U.S. corn yields, and strong global demand for soybeans and cotton. Over the longer run, global economic recovery with steady growth provides an improved foundation for crop demand. Despite some growth potential from the E15 (15-percent ethanol blend) market, increases in corn-based ethanol production in the United States are projected to slow. Nonetheless, the large expansion in recent years keeps corn use for ethanol high. In combination, these factors support longer run increases in global consumption and trade. Prices fall from current high levels, but remain at historically high levels for many crops.

Projections for field crops reflect provisions of the Food, Conservation, and Energy Act of 2008 (2008 Farm Act), which are assumed to continue through the projection period. Acreage enrolled in the Conservation Reserve Program (CRP) has fallen from more than 36 million acres to about 31.4 million acres and is projected to remain close to 32 million acres throughout the projections. This reduction in CRP acreage provides some additional cropland for potential use in production.

The 45-cents-per-gallon tax credit available to blenders of ethanol and the 54-cents-per-gallon tariff on imported fuel ethanol are assumed to remain in effect through the end of the projection period. The tax credit for blending biodiesel that had expired at the end of 2009 was not assumed to be available because its reinstatement occurred after the projections were completed.

Current high prices lead to an increase in planted cropland in 2011, reaching 255 million acres for the 8 major field crops, up from 245 million in 2010 and above the recent high of 253 million in 2008. Although prices and plantings decline over the next several years, strong demand continues to keep prices historically high, providing economic incentives to hold projected plantings at 249250 million acres over the remainder of the projection period.

## U.S. planted area: Eight major crops $1 /$



1 / The eight major crops are com, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans.


Continuing high levels of domestic corn-based ethanol production and gains in exports keep corn demand high. Strong producer returns keep corn acreage in a range of 90 to 92 million acres over the projection period compared to 88 million in 2010. Acreage changes for other feed grains are minimal.

- Most ethanol production in the United States currently uses corn as the feedstock, with about 36 percent of total corn use expected to go to ethanol production over the projection period. Even with the U.S. Environmental Protection Agency's (EPA’s) October 2010 announced approval for use of E15 in model year 2007 and newer passenger vehicles (including cars, sport utility vehicles, and light pickup trucks), smaller gains for corn-based ethanol are projected over the next 10 years than have occurred in recent years. This result reflects only moderate growth in overall gasoline consumption in the United States, limited potential for further market penetration of ethanol into the E10 (10-percent ethanol blend) market, constraints in the E15 market, and the small size of the E85 (85-percent ethanol blend) market. By the end of the projection period, corn-based ethanol production represents more than 10 percent of annual gasoline consumption.
- Feed and residual use of corn bottoms out in the initial years due to reduced meat production and increased feeding of distillers grains, a coproduct of dry mill ethanol production. Feed use rises through the rest of the projections as meat production picks up and growth in the availability of distillers grains slows with the reduced pace of corn-based ethanol expansion.
- Food and industrial use of corn (other than for ethanol production) is projected to rise over the next decade. Use of corn for high fructose corn syrup, glucose, and dextrose increases at less than half the rate of population gain, limited by consumer dietary concerns and other changes in tastes and preferences. Other food uses of corn are also projected to rise more slowly than the increase in population. Starch use of corn responds to industrial demand, rebounding as the U.S. economy recovers and rising faster than population throughout the projection period.
- U.S. corn exports rise in response to stronger global demand for feed grains to support growth in meat production. Although lower than has been typical in the past, the U.S. share of global corn trade remains above 50 percent in the projections.


## U.S. wheat: Domestic use and exports



Strong wheat prices and expected net returns boost wheat plantings for 2011. However, with relatively weak overall demand growth for wheat and continuing large stocks, producer returns fall in subsequent years, leading to a decline in wheat plantings to about 51 million acres by the end of the projection period.

- Domestic demand for wheat reflects a relatively mature market. Food use of wheat is projected to show moderate gains, generally in line with U.S. population increases.
- Feed use of wheat, a lower value market for the crop, increases moderately into 2011/12 reflecting favorable prices relative to corn in the summer. For later years, wheat feed use levels off at 175 million bushels per year as prices relative to corn allow some competition of feed wheat with feed grains.
- U.S. wheat exports are boosted in the near term due to relatively tight market conditions following the 2010 production shortfall in Russia and other countries of the former Soviet Union. In the longer run, U.S. wheat exports fall back to 900 million bushels annually and remain flat over the projection period. U.S. wheat trade is limited in early years by large exports from India to reduce their high stocks and later by renewed competition primarily from the Black Sea region. Notably, India's wheat exports reach as high as 3 million metric tons (a 2.2-percent share of global wheat trade) in 2013/14 before dropping off to negligible levels toward the end of the projections. Russia's wheat exports rebound from the drought-reduced low levels of 2010/11, rising to account for 15 percent of global trade by the end of the decade. The EU market share declines from 17 percent in 2010/11 to 14 percent in 2020/21. For the same time period, the U.S. market share declines from 27 percent to 16 percent.


## U.S. soybeans: Domestic use and exports


U.S. soybean plantings rise over the projection period as growth in both domestic and export demand keep prices and producer returns favorable.

- Reductions in U.S. livestock production and increased availability of distillers grains have lowered demand for soybean meal for livestock feed in recent years, thereby reducing domestic soybean crush. However, as meat production gains resume, soybean crush will follow.
- Strong global demand for soybeans, particularly in China, supports increases in U.S. soybean exports. Despite rapid import growth, continued competition from South America, particularly Brazil, leads to a reduction in the U.S. share of global soybean trade from 44 percent in 2009/10 to about 37 percent toward the end of the projection period.
- Strengthening competition from Argentina and Brazil, combined with increasing use for the growing U.S. livestock sector, limit U.S. soybean meal exports in the projections. The U.S. export share in global soybean meal trade would decline from 14 percent in 2010/11 to below 12 percent by 2020/21. U.S. soybean oil exports similarly face increasing competition from South America. Argentina, in particular, is a competitive exporter of soybean oil because its graduated export taxes favor exports of soybean products over soybeans.
- Soybean oil used to produce methyl esters (biodiesel) grows to 3.6 billion pounds by the end of the projection period, representing about 17 percent of total use of soybean oil and supporting the production of close to 500 million gallons of biodiesel. Although some other first-use vegetable oils are also used to produce biodiesel, most of the remaining biodiesel production needed to reach the 1-billion-gallon use mandate of the 2007 Energy Act uses animal fats or recycled vegetable oil as the feedstock. Exports of biodiesel will continue to be constrained by the EU's anti-dumping and countervailing duties on U.S. shipments.


## U.S. farm-level prices: Corn, wheat, and soybeans



A number of short-term factors have led to high prices for grains and oilseeds in 2010/11, including reduced global wheat production (especially in Russia), a decline in U.S. corn yields, and strong global demand for soybeans. Although market responses to these prices are projected to reduce prices over the next several years, U.S. prices for corn, wheat, and soybeans are projected to remain historically high. The continuing influence of several factors, including global economic growth, a depreciating dollar, escalating costs for crude petroleum, and rising biofuel production, underlie these crop price projections over the long term.

- Although corn prices fall from their current high levels, they are projected to remain historically high due to continued demand for corn for ethanol production as well as growth in feed use and exports.
- Strengthening demand for soybeans and soybean products holds soybean prices high throughout the projections.
- Wheat prices decline from 2011/12 to 2015/16 and then are projected to rise moderately over the rest of the decade. Despite gains in wheat yields, declining acreage and increasing demand gradually reduce stocks.


## U.S. rice: Domestic and residual use and exports


U.S. planted area to rice is projected to fall over the next couple of years from 2010's near-record in response to declining expected producer returns and increased competition for land from other crops. Plantings then increase marginally after 2012 as producer returns improve. Continued expansion in U.S. food use of rice is projected over the next decade. U.S. rice exports increase as well, but somewhat slower than overall growth in global rice trade.

- Domestic use of rice is projected to grow slightly faster than population growth. Imports of aromatic varieties of rice from Asia account for a growing share of domestic use in the projections.
- U.S. rice exports are projected to increase, reflecting a lower U.S. price difference over Asian competitors’ price than in recent years. Nonetheless, export growth falls short of the pace of overall rice trade gains, so the U.S. market share declines. Rough rice exports to Latin America are expected to continue increasing, and account for most of the U.S. export expansion.
- Stocks of rice fall from initially large levels, reducing the stocks-to-use ratio to a more sustainable level of about 13 percent by the end of the projection period.
- Global rice prices have fallen from the highs of 2008/09 and are expected to continue dropping through 2013/14. Global prices then increase about 2 percent per year, reaching nearly $\$ 12$ per hundredweight (rough basis) at the end of the projection period. These price increases largely reflect tightening global stocks of rice, which is due to slow yield growth and limited ability to expand area in most producing countries. This effect is partially offset by declining global per capita disappearance of rice, caused largely by dietary shifts away from staple foods in Asia as incomes rise.
- U.S. rice prices follow a pattern similar to global prices, continuing their fall from the record high in 2008/09 for the next couple of years, before rising in the latter years of the projections. By the end of the projection period, U.S. rice prices are approaching $\$ 14$ per hundredweight.


## U.S. upland cotton: Domestic mill use and exports



High cotton prices lead to a large increase in cotton plantings in 2011, but plantings subsequently decline moderately as lower prices reduce returns. U.S. mill use of upland cotton continues to decline throughout the projections while cotton exports rise.

- The decline in mill use of cotton is projected to continue over the next decade. At the end of the projection period, domestic mill use is projected to represent less than 16 percent of total use. Underlying this projection is an increase in apparel imports by the United States over the next 10 years, reducing domestic apparel production and lowering the apparel industry's demand for fabric and yarn produced in the United States.
- U.S. upland cotton exports rebounded in 2010/11 in response to strong global trade demand and facilitated by increased U.S. cotton plantings and production, boosting the U.S. trade share to over 40 percent. After falling back slightly during the first half of the projection period, continued strong global demand leads to moderate gains in U.S. cotton exports through the rest of the decade. Nonetheless, export gains are slower than global trade increases, so the U.S. share of world cotton trade falls to about 34 percent by 2020/21.


## U.S. sugar: Domestic production, use, and imports

Million short tons


The two primary determinants of U.S. sugar supply and use over the long-term projection period are the implementation of the sugar and energy provisions of the 2008 Farm Act and reliance on sugar imports from Mexico to maintain balance in the U.S. sugar market. The projections assume that sugar tariff-rate quotas are not increased above initial levels and that U.S. policymakers aim for an ending year stocks-touse ratio of 13.5 percent. Mexico is assumed to export sugar to the United States to meet this level.

- Sugar provisions of the North American Free Trade Agreement (NAFTA) removed all duties and quantitative restrictions on sweetener trade between Mexico and the United States as of January 1, 2008. Mexican exportable sugar supplies are expected to rise as a result of increased use of high fructose corn syrup (mostly imported from the United States) that displaces sugar in beverage and food manufacturing end uses in Mexico. As a consequence, Mexico’s sugar exports to the higherpriced U.S. market grow over the decade and represent more than 15 percent of U.S. supplies at the end of the projection period, up from about 8 percent in 2010/11. The projections assume that Mexico will import sugar from the lower-priced world market when necessary to assure sufficient supplies to meet their domestic consumption requirements.
- Projected growth in U.S. beet and cane sugar production is low over the next decade. Beet sugar production averages 4.715 million short tons, raw value (STRV) over 2011/12 to 2020/21 and cane sugar production averages 3.567 million STRV. As a result, sugar production averages only 72 percent of domestic consumption, far below the 85-percent minimum allotment level.
- Deliveries of sugar for human use rebound in 2012/13 from the small changes in the prior 2 years. Gains over the remainder of the projections average 0.8 percent per year, slightly less than population growth.
- There are no sugar loan forfeitures in the projections nor any CCC purchases of sugar for ethanol for use in the Feedstock Flexibility Program. With an annual stocks-to-use ratio of 13.5 percent, raw cane and refined beet sugar prices are above the minimum prices to avoid forfeiture for the entire projection period. Sugar refining capacity is sufficient to keep refined sugar prices from rising. The long term equilibrium world raw sugar price is assumed to equal 16 cents per poundhistorically high, but not high enough to exert upward pressure on U.S. raw and refined sugar prices.


## Value of U.S. horticultural trade



Farm sales of horticultural crops are projected to grow by 1.5 percent annually over the next decade, reaching $\$ 67.4$ billion in calendar year 2020, up from $\$ 58$ billion in 2010.

- Vegetables and melons, which rank first in farm sales value at 38 percent of the total, are projected to grow at 1.7 percent annually. Fruits and tree nuts are expected to increase slightly faster at 1.8 percent per year, while greenhouse and nursery crops grow at 0.8 percent.
- The volume of farm production of horticultural crops is forecast to rise by 0.7 percent annually. Vegetables and melons lead production growth at 0.8 percent, reaching 150 billion pounds in 2020. Fruit and nut production expands by 0.6 percent per year to 66 billion pounds in 2020.
- Producer prices for vegetables are expected to rise at 0.9 percent per year. Producer prices for fruits rise by 1.3 percent per year due to somewhat slower production growth than vegetables.
- U.S. per capita use of fruits and tree nuts is forecast to increase from 267 pounds in 2010 to 279 pounds by 2020, an annual change of 0.4 percent. Per capita use of vegetables is anticipated to grow from 425 pounds in 2010 to 436 in 2020, up an average of 0.3 percent per year. The total supply of fruits and vegetables over the next decade, both domestic and imported, is projected to grow at an average rate of 1.2 percent per year.
- U.S. horticultural import value is projected to increase by 4.8 percent annually over the next decade after increasing by 8 percent on average in the past decade. Imports of fresh fruits and vegetables will largely drive this growth. The import value of vegetables is expected to expand faster than for fruits and nuts due to relatively greater import demand for vegetables.
- The U.S. trade deficit in horticultural crops and products expands from $\$ 13$ billion in fiscal year 2010 to $\$ 22.6$ billion in 2020. Of the $\$ 34$ billion total U.S. exports of horticultural products in 2020, fruits and nuts contribute $\$ 15.9$ billion and vegetables account for $\$ 7.1$ billion. Total imports of about $\$ 56.9$ billion in 2020 include $\$ 18.3$ billion worth of fruits and nuts, and $\$ 14.6$ billion of fresh and processed vegetables.
- Imports increasingly supplement the domestic supply of horticultural crops and products. In terms of farm weight, imports of fruits and nuts will account for 45 percent of domestic use by 2020, up from 42 percent in 2010. Imported vegetables are projected to represent 24 percent of domestic use in 2020, an increase from 20 percent in 2010.
- The export market also becomes increasingly important for U.S. horticulture products, although relative gains are smaller than for imports. Exports represent more than a quarter of fruits and nuts production in 2020 while about 16 percent of vegetable production will be sold abroad, each up about 1 percentage point from 2010.

Table 18. Acreage for major field crops and Conservation Reserve Program (CRP) assumptions, long-term projections

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  | Million acres |  |  |  |  |  |

Table 19. U.S. corn long-term projections

| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted acres | 86.5 | 88.2 | 92.0 | 91.5 | 91.0 | 90.5 | 90.5 | 90.5 | 91.0 | 91.5 | 92.0 | 92.0 |
| Harvested acres | 79.6 | 81.3 | 84.9 | 84.4 | 83.9 | 83.4 | 83.4 | 83.4 | 83.9 | 84.4 | 84.9 | 84.9 |
| Yields (bushels per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 164.7 | 154.3 | 162.0 | 164.0 | 166.0 | 168.0 | 170.0 | 172.0 | 174.0 | 176.0 | 178.0 | 180.0 |
| Supply and use (million bushels): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 1,673 | 1,708 | 827 | 1,127 | 1,332 | 1,437 | 1,447 | 1,442 | 1,342 | 1,262 | 1,227 | 1,242 |
| Production | 13,110 | 12,540 | 13,755 | 13,840 | 13,925 | 14,010 | 14,180 | 14,345 | 14,600 | 14,855 | 15,110 | 15,280 |
| Imports | 8 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Supply | 14,792 | 14,257 | 14,592 | 14,977 | 15,267 | 15,457 | 15,637 | 15,797 | 15,952 | 16,127 | 16,347 | 16,532 |
| Feed \& residual | 5,159 | 5,300 | 5,200 | 5,300 | 5,400 | 5,500 | 5,600 | 5,700 | 5,750 | 5,800 | 5,875 | 5,950 |
| Food, seed, \& industrial | 5,938 | 6,180 | 6,265 | 6,320 | 6,380 | 6,435 | 6,495 | 6,605 | 6,740 | 6,850 | 6,930 | 6,990 |
| Ethanol for fuel | 4,568 | 4,800 | 4,875 | 4,925 | 4,975 | 5,025 | 5,075 | 5,175 | 5,300 | 5,400 | 5,475 | 5,525 |
| Domestic use | 11,097 | 11,480 | 11,465 | 11,620 | 11,780 | 11,935 | 12,095 | 12,305 | 12,490 | 12,650 | 12,805 | 12,940 |
| Exports | 1,987 | 1,950 | 2,000 | 2,025 | 2,050 | 2,075 | 2,100 | 2,150 | 2,200 | 2,250 | 2,300 | 2,350 |
| Total use | 13,084 | 13,430 | 13,465 | 13,645 | 13,830 | 14,010 | 14,195 | 14,455 | 14,690 | 14,900 | 15,105 | 15,290 |
| Ending stocks | 1,708 | 827 | 1,127 | 1,332 | 1,437 | 1,447 | 1,442 | 1,342 | 1,262 | 1,227 | 1,242 | 1,242 |
| Stocks/use ratio, percent | 13.1 | 6.2 | 8.4 | 9.8 | 10.4 | 10.3 | 10.2 | 9.3 | 8.6 | 8.2 | 8.2 | 8.1 |
| Price (dollars per bushel): |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm price | 3.55 | 5.20 | 4.80 | 4.30 | 4.10 | 4.10 | 4.10 | 4.15 | 4.20 | 4.25 | 4.25 | 4.25 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 299 | 287 | 304 | 310 | 314 | 318 | 323 | 329 | 335 | 341 | 347 | 353 |
| Per bushel | 1.82 | 1.86 | 1.87 | 1.89 | 1.89 | 1.90 | 1.90 | 1.91 | 1.93 | 1.94 | 1.95 | 1.96 |
| Returns over variable costs (dollars per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Net returns | 286 | 515 | 474 | 395 | 367 | 370 | 374 | 384 | 396 | 407 | 410 | 412 |

Table 20. U.S. sorghum long-term projections

| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted acres | 6.6 | 5.4 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Harvested acres | 5.5 | 4.7 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Yields (bushels per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 69.4 | 72.5 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 |
| Supply and use (million bushels): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 55 | 41 | 39 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Production | 383 | 338 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 |
| Imports | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Supply | 438 | 379 | 379 | 384 | 384 | 384 | 384 | 384 | 384 | 384 | 384 | 384 |
| Feed \& residual | 140 | 90 | 80 | 80 | 75 | 70 | 65 | 60 | 55 | 50 | 45 | 40 |
| Food, seed, \& industrial | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Domestic use | 230 | 180 | 170 | 170 | 165 | 160 | 155 | 150 | 145 | 140 | 135 | 130 |
| Exports | 166 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 | 210 |
| Total use | 396 | 340 | 335 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 | 340 |
| Ending stocks | 41 | 39 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Stocks/use ratio, percent | 10.4 | 11.5 | 13.1 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 | 12.9 |
| Price (dollars per bushel): |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm price | 3.22 | 5.30 | 4.35 | 3.95 | 3.80 | 3.80 | 3.80 | 3.85 | 3.90 | 3.95 | 3.95 | 3.95 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 146 | 149 | 157 | 161 | 164 | 166 | 169 | 172 | 175 | 178 | 181 | 185 |
| Per bushel | 2.10 | 2.06 | 2.41 | 2.47 | 2.51 | 2.55 | 2.59 | 2.64 | 2.68 | 2.73 | 2.78 | 2.83 |

Returns over variable costs (dollars per acre):

| Net returns | 78 | 235 | 127 | 97 | 84 | 82 | 79 | 79 | 80 | 80 | 77 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note: Marketing year beginning September 1 for sorghum. |  |  |  |  |  |  | 73 |  |  |  |  |

Table 21. U.S. barley long-term projections

| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted acres | 3.6 | 2.9 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Harvested acres | 3.1 | 2.5 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Yields (bushels per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 73.0 | 73.1 | 67.4 | 68.0 | 68.6 | 69.2 | 69.7 | 70.3 | 70.9 | 71.5 | 72.1 | 72.7 |
| Supply and use (million bushels): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 89 | 115 | 86 | 80 | 80 | 82 | 81 | 81 | 82 | 80 | 79 | 80 |
| Production | 227 | 180 | 189 | 190 | 192 | 194 | 195 | 197 | 199 | 200 | 202 | 204 |
| Imports | 17 | 15 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Supply | 333 | 311 | 295 | 290 | 292 | 296 | 296 | 298 | 301 | 300 | 301 | 304 |
| Feed \& residual | 48 | 50 | 40 | 35 | 35 | 40 | 40 | 40 | 45 | 45 | 45 | 45 |
| Food, seed, \& industrial | 164 | 165 | 165 | 165 | 165 | 165 | 165 | 166 | 166 | 166 | 166 | 166 |
| Domestic | 212 | 215 | 205 | 200 | 200 | 205 | 205 | 206 | 211 | 211 | 211 | 211 |
| Exports | 6 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Total use | 217 | 225 | 215 | 210 | 210 | 215 | 215 | 216 | 221 | 221 | 221 | 221 |
| Ending stocks | 115 | 86 | 80 | 80 | 82 | 81 | 81 | 82 | 80 | 79 | 80 | 83 |
| Stocks/use ratio, percent | 53.0 | 38.2 | 37.2 | 38.1 | 39.0 | 37.7 | 37.7 | 38.0 | 36.2 | 35.7 | 36.2 | 37.6 |
| Price (dollars per bushel): |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm price | 4.66 | 4.00 | 4.70 | 4.95 | 4.75 | 4.70 | 4.75 | 4.80 | 4.85 | 4.90 | 4.90 | 4.90 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 143 | 141 | 149 | 152 | 155 | 157 | 160 | 163 | 166 | 169 | 172 | 175 |
| Per bushel | 1.96 | 1.93 | 2.21 | 2.24 | 2.25 | 2.27 | 2.29 | 2.32 | 2.34 | 2.36 | 2.39 | 2.41 |

Returns over variable costs (dollars per acre):

| Net returns | 197 | 151 | 168 | 184 | 171 | 168 | 171 | 175 | 178 | 181 | 181 | 181 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Not: Marketing |  |  |  |  |  |  |  |  |  |  |  |  |

Note: Marketing year beginning June 1 for barley.

Table 22. U.S. oats long-term projections

| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted acres | 3.4 | 3.1 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Harvested acres | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Yields (bushels per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 67.5 | 64.3 | 65.0 | 65.4 | 65.8 | 66.2 | 66.6 | 67.0 | 67.5 | 67.9 | 68.3 | 68.7 |
| Supply and use (million bushels): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 84 | 80 | 48 | 47 | 46 | 45 | 44 | 44 | 43 | 43 | 43 | 43 |
| Production | 93 | 81 | 78 | 78 | 79 | 79 | 80 | 80 | 81 | 81 | 82 | 82 |
| Imports | 95 | 80 | 110 | 105 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Supply | 272 | 242 | 236 | 230 | 225 | 224 | 224 | 224 | 224 | 224 | 225 | 225 |
| Feed \& residual | 115 | 115 | 110 | 105 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Food, seed, \& industrial | 75 | 76 | 76 | 76 | 77 | 77 | 77 | 78 | 78 | 78 | 79 | 79 |
| Domestic | 190 | 191 | 186 | 181 | 177 | 177 | 177 | 178 | 178 | 178 | 179 | 179 |
| Exports | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Total use | 192 | 194 | 189 | 184 | 180 | 180 | 180 | 181 | 181 | 181 | 182 | 182 |
| Ending stocks | 80 | 48 | 47 | 46 | 45 | 44 | 44 | 43 | 43 | 43 | 43 | 43 |
| Stocks/use ratio, percent | 41.7 | 24.7 | 24.9 | 25.0 | 25.0 | 24.4 | 24.4 | 23.8 | 23.8 | 23.8 | 23.6 | 23.6 |
| Price (dollars per bushel): |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm price | 2.02 | 2.35 | 2.75 | 2.55 | 2.50 | 2.50 | 2.50 | 2.50 | 2.55 | 2.55 | 2.55 | 2.55 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 102 | 101 | 107 | 109 | 111 | 112 | 114 | 117 | 119 | 121 | 124 | 126 |
| Per bushel | 1.52 | 1.57 | 1.64 | 1.66 | 1.68 | 1.70 | 1.72 | 1.74 | 1.76 | 1.79 | 1.81 | 1.84 |

Returns over variable costs (dollars per acre):

| Net returns | 34 | 50 | 72 | 58 | 54 | 53 | 52 | 51 | 53 | 52 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note: Marketing year beginning June 1 for oats. |  |  |  |  |  |  |  |  |  |  |

Table 23. U.S. wheat long-term projections

| Item | 2009/10 | 010/11 | 011/12 | 012/13 | 013/14 | 014/15 | 015/16 | 016/17 | 017/18 | 018/19 | 2019/20 | 020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted acres | 59.2 | 53.6 | 57.0 | 55.5 | 54.0 | 53.0 | 52.0 | 51.5 | 51.5 | 51.5 | 51.0 | 51.0 |
| Harvested acres | 49.9 | 47.6 | 48.5 | 47.2 | 45.9 | 45.1 | 44.2 | 43.8 | 43.8 | 43.8 | 43.4 | 43.4 |
| Yields (bushels per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 44.5 | 46.4 | 43.8 | 44.2 | 44.5 | 44.8 | 45.2 | 45.5 | 45.8 | 46.1 | 46.5 | 46.8 |
| Supply and use (million bushels): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 657 | 976 | 848 | 718 | 706 | 746 | 759 | 743 | 718 | 694 | 682 | 661 |
| Production | 2,218 | 2,208 | 2,125 | 2,085 | 2,045 | 2,020 | 2,000 | 1,995 | 2,005 | 2,020 | 2,020 | 2,030 |
| Imports | 119 | 110 | 110 | 110 | 110 | 115 | 115 | 120 | 120 | 125 | 125 | 130 |
| Supply | 2,993 | 3,294 | 3,083 | 2,913 | 2,861 | 2,881 | 2,874 | 2,858 | 2,843 | 2,839 | 2,827 | 2,821 |
| Food | 917 | 940 | 950 | 959 | 968 | 977 | 986 | 995 | 1,004 | 1,013 | 1,022 | 1,031 |
| Seed | 69 | 76 | 75 | 73 | 72 | 70 | 70 | 70 | 70 | 69 | 69 | 69 |
| Feed \& residual | 150 | 180 | 190 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Domestic | 1,137 | 1,196 | 1,215 | 1,207 | 1,215 | 1,222 | 1,231 | 1,240 | 1,249 | 1,257 | 1,266 | 1,275 |
| Exports | 881 | 1,250 | 1,150 | 1,000 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 |
| Total use | 2,018 | 2,446 | 2,365 | 2,207 | 2,115 | 2,122 | 2,131 | 2,140 | 2,149 | 2,157 | 2,166 | 2,175 |
| Ending stocks | 976 | 848 | 718 | 706 | 746 | 759 | 743 | 718 | 694 | 682 | 661 | 646 |
| Stocks/use ratio, percent | 48.4 | 34.7 | 30.4 | 32.0 | 35.3 | 35.8 | 34.9 | 33.6 | 32.3 | 31.6 | 30.5 | 29.7 |
| Price (dollars per bushel): |  |  |  |  |  |  |  |  |  |  |  |  |
| Farm price | 4.87 | 5.50 | 6.50 | 5.90 | 5.55 | 5.45 | 5.45 | 5.50 | 5.50 | 5.55 | 5.55 | 5.60 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 129 | 125 | 133 | 136 | 138 | 140 | 142 | 145 | 148 | 151 | 154 | 157 |
| Per bushel | 2.89 | 2.70 | 3.03 | 3.07 | 3.09 | 3.12 | 3.15 | 3.19 | 3.23 | 3.27 | 3.30 | 3.35 |
| Returns over variable costs (dollars per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Net returns | 88 | 130 | 152 | 125 | 109 | 104 | 104 | 105 | 104 | 105 | 104 | 105 |


| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Soybeans |  |  |  |  |  |  |  |  |  |  |  |  |
| Area (million acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted | 77.5 | 77.7 | 78.0 | 78.3 | 78.5 | 79.0 | 79.0 | 79.5 | 79.5 | 79.5 | 79.5 | 79.5 |
| Harvested | 76.4 | 76.8 | 77.1 | 77.3 | 77.6 | 78.1 | 78.1 | 78.5 | 78.5 | 78.5 | 78.5 | 78.5 |
| Yield/harvested acre (bushels) | 44.0 | 43.9 | 43.5 | 44.0 | 44.4 | 44.9 | 45.3 | 45.8 | 46.2 | 46.7 | 47.1 | 47.6 |
| Supply (million bushels) |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks, September 1 | 138 | 151 | 185 | 190 | 195 | 194 | 197 | 199 | 196 | 197 | 198 | 199 |
| Production | 3,359 | 3,375 | 3,355 | 3,395 | 3,445 | 3,505 | 3,540 | 3,590 | 3,625 | 3,660 | 3,695 | 3,735 |
| Imports | 15 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Total supply | 3,512 | 3,536 | 3,550 | 3,595 | 3,650 | 3,709 | 3,747 | 3,799 | 3,831 | 3,867 | 3,903 | 3,945 |
| Disposition (million bushels) |  |  |  |  |  |  |  |  |  |  |  |  |
| Crush | 1,752 | 1,665 | 1,660 | 1,670 | 1,695 | 1,715 | 1,735 | 1,770 | 1,790 | 1,810 | 1,830 | 1,850 |
| Seed and residual | 108 | 117 | 125 | 125 | 126 | 127 | 128 | 128 | 129 | 129 | 129 | 130 |
| Exports | 1,501 | 1,570 | 1,575 | 1,605 | 1,635 | 1,670 | 1,685 | 1,705 | 1,715 | 1,730 | 1,745 | 1,765 |
| Total disposition | 3,361 | 3,351 | 3,360 | 3,400 | 3,456 | 3,512 | 3,548 | 3,603 | 3,634 | 3,669 | 3,704 | 3,745 |
| Carryover stocks, August 31 |  |  |  |  |  |  |  |  |  |  |  |  |
| Total ending stocks | 151 | 185 | 190 | 195 | 194 | 197 | 199 | 196 | 197 | 198 | 199 | 200 |
| Stocks/use ratio, percent | 4.5 | 5.5 | 5.7 | 5.7 | 5.6 | 5.6 | 5.6 | 5.4 | 5.4 | 5.4 | 5.4 | 5.3 |
| Price (dollars per bushel) |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybean price, farm | 9.59 | 11.45 | 11.20 | 10.55 | 10.25 | 10.20 | 10.25 | 10.25 | 10.30 | 10.30 | 10.35 | 10.35 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 132 | 131 | 136 | 139 | 140 | 142 | 144 | 146 | 148 | 150 | 152 | 154 |
| Per bushel | 3.01 | 2.98 | 3.13 | 3.15 | 3.16 | 3.17 | 3.18 | 3.19 | 3.20 | 3.22 | 3.23 | 3.24 |
| Returns over variable costs (dollars per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Net returns | 290 | 372 | 351 | 325 | 315 | 315 | 320 | 323 | 328 | 330 | 335 | 338 |
| Soybean oil (million pounds) |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks, October 1 | 2,861 | 3,358 | 2,653 | 2,368 | 2,073 | 2,093 | 2,143 | 2,123 | 2,208 | 2,223 | 2,198 | 2,128 |
| Production | 19,615 | 18,980 | 18,940 | 19,070 | 19,375 | 19,620 | 19,865 | 20,285 | 20,530 | 20,780 | 21,025 | 21,275 |
| Imports | 105 | 115 | 125 | 135 | 145 | 155 | 165 | 175 | 185 | 195 | 205 | 215 |
| Total supply | 22,581 | 22,453 | 21,718 | 21,573 | 21,593 | 21,868 | 22,173 | 22,583 | 22,923 | 23,198 | 23,428 | 23,618 |
| Domestic disappearance | 15,822 | 17,100 | 17,400 | 18,000 | 18,200 | 18,425 | 18,650 | 18,875 | 19,125 | 19,375 | 19,625 | 19,875 |
| For methyl ester ${ }^{1}$ | 1,682 | 2,900 | 3,100 | 3,500 | 3,500 | 3,500 | 3,500 | 3,500 | 3,525 | 3,550 | 3,575 | 3,600 |
| Exports | 3,400 | 2,700 | 1,950 | 1,500 | 1,300 | 1,300 | 1,400 | 1,500 | 1,575 | 1,625 | 1,675 | 1,700 |
| Total demand | 19,222 | 19,800 | 19,350 | 19,500 | 19,500 | 19,725 | 20,050 | 20,375 | 20,700 | 21,000 | 21,300 | 21,575 |
| Ending stocks, September 30 | 3,358 | 2,653 | 2,368 | 2,073 | 2,093 | 2,143 | 2,123 | 2,208 | 2,223 | 2,198 | 2,128 | 2,043 |
| Soybean oil price (dollars per lb) | 0.357 | 0.445 | 0.455 | 0.455 | 0.455 | 0.460 | 0.460 | 0.460 | 0.463 | 0.465 | 0.468 | 0.470 |
| Soybean meal (thousand short tons) |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks, October 1 | 235 | 303 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Production | 41,702 | 39,532 | 39,435 | 39,685 | 40,235 | 40,685 | 41,235 | 41,985 | 42,485 | 42,985 | 43,485 | 43,985 |
| Imports | 150 | 165 | 165 | 165 | 165 | 165 | 165 | 165 | 165 | 165 | 165 | 165 |
| Total supply | 42,087 | 40,000 | 39,900 | 40,150 | 40,700 | 41,150 | 41,700 | 42,450 | 42,950 | 43,450 | 43,950 | 44,450 |
| Domestic disappearance | 30,634 | 30,600 | 31,000 | 31,250 | 31,700 | 32,150 | 32,650 | 33,150 | 33,650 | 34,150 | 34,650 | 35,150 |
| Exports | 11,150 | 9,100 | 8,600 | 8,600 | 8,700 | 8,700 | 8,750 | 9,000 | 9,000 | 9,000 | 9,000 | 9,000 |
| Total demand | 41,784 | 39,700 | 39,600 | 39,850 | 40,400 | 40,850 | 41,400 | 42,150 | 42,650 | 43,150 | 43,650 | 44,150 |
| Ending stocks, September 30 | 303 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Soybean meal price (dollars per ton) | 311.27 | 330.00 | 312.50 | 286.00 | 275.00 | 271.00 | 273.50 | 273.50 | 275.00 | 274.00 | 275.00 | 275.00 |
| Crushing yields (pounds per bushel) |  |  |  |  |  |  |  |  |  |  |  |  |
| Soybean oil | 11.20 | 11.40 | 11.41 | 11.42 | 11.43 | 11.44 | 11.45 | 11.46 | 11.47 | 11.48 | 11.49 | 11.50 |
| Soybean meal | 47.60 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 | 47.50 |
| Crush margin (dollars per bushel) | 1.81 | 1.46 | 1.41 | 1.44 | 1.48 | 1.50 | 1.51 | 1.52 | 1.54 | 1.55 | 1.55 | 1.59 |

Note: Marketing year beginning September 1 for soybeans; October 1 for soybean oil and soybean meal.
1/ Soybean oil used for methyl ester for production of biodiesel, history from the U.S. Department of Commerce.

| Item | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL |  |  |  |  |  |  |  |  |  |  |  |  |
| Area (thousand acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted | 3,135 | 3,642 | 3,300 | 3,200 | 3,215 | 3,230 | 3,290 | 3,300 | 3,310 | 3,310 | 3,310 | 3,310 |
| Harvested | 3,103 | 3,623 | 3,275 | 3,176 | 3,191 | 3,206 | 3,265 | 3,275 | 3,285 | 3,285 | 3,285 | 3,285 |
| Yields (pounds per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 7,085 | 6,669 | 7,102 | 7,191 | 7,267 | 7,339 | 7,400 | 7,466 | 7,534 | 7,595 | 7,662 | 7,726 |
| Supply and use (million hundredweight): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 30.6 | 36.7 | 49.8 | 50.9 | 45.9 | 41.4 | 37.4 | 36.7 | 36.5 | 36.9 | 36.7 | 36.7 |
| Production | 219.9 | 241.6 | 232.6 | 228.4 | 231.9 | 235.3 | 241.6 | 244.5 | 247.5 | 249.5 | 251.7 | 253.8 |
| Imports | 19.0 | 19.5 | 20.0 | 20.6 | 21.1 | 21.7 | 22.3 | 22.8 | 23.4 | 24.0 | 24.7 | 25.3 |
| Total supply | 269.4 | 297.8 | 302.4 | 299.9 | 298.9 | 298.4 | 301.2 | 304.0 | 307.5 | 310.4 | 313.0 | 315.8 |
| Domestic use and residual | 122.6 | 129.0 | 130.5 | 132.0 | 133.5 | 135.0 | 136.5 | 138.0 | 139.6 | 141.2 | 142.8 | 144.4 |
| Exports | 110.2 | 119.0 | 121.0 | 122.0 | 124.0 | 126.0 | 128.0 | 129.5 | 131.0 | 132.5 | 133.5 | 134.5 |
| Total use | 232.7 | 248.0 | 251.5 | 254.0 | 257.5 | 261.0 | 264.5 | 267.5 | 270.6 | 273.7 | 276.3 | 278.9 |
| Ending stocks | 36.7 | 49.8 | 50.9 | 45.9 | 41.4 | 37.4 | 36.7 | 36.5 | 36.9 | 36.7 | 36.7 | 36.9 |
| Stocks/use ratio, percent | 15.8 | 20.1 | 20.2 | 18.1 | 16.1 | 14.3 | 13.9 | 13.7 | 13.6 | 13.4 | 13.3 | 13.2 |
| Milling rate, percent | 69.4 | 68.9 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 | 69.0 |
| Prices (dollars per hundredweight): |  |  |  |  |  |  |  |  |  |  |  |  |
| World price | 11.24 | 11.15 | 11.00 | 10.30 | 10.30 | 10.51 | 10.72 | 10.93 | 11.15 | 11.37 | 11.60 | 11.83 |
| Average farm price | 14.00 | 12.60 | 12.60 | 12.10 | 12.20 | 12.51 | 12.72 | 12.93 | 13.15 | 13.37 | 13.60 | 13.83 |
| Variable costs of production (dollars): |  |  |  |  |  |  |  |  |  |  |  |  |
| Per acre | 472 | 480 | 502 | 513 | 520 | 528 | 536 | 544 | 553 | 562 | 571 | 580 |
| Per hundredweight | 6.71 | 7.19 | 7.07 | 7.13 | 7.16 | 7.19 | 7.24 | 7.29 | 7.34 | 7.39 | 7.45 | 7.51 |
| Returns over variable costs (dollars per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Net returns | 520 | 361 | 393 | 357 | 366 | 390 | 406 | 421 | 438 | 454 | 471 | 489 |

LONG GRAIN
Area (thousand acres):

| Planted | 2,290 | 2,836 | 2,500 | 2,400 | 2,400 | 2,400 | 2,450 | 2,450 | 2,450 | 2,450 | 2,450 | 2,450 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Harvested | 2,265 | 2,821 | 2,480 | 2,381 | 2,381 | 2,381 | 2,430 | 2,430 | 2,430 | 2,430 | 2,430 | 2,430 |
| Yields (lbs per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 6,743 | 6,434 | 6,800 | 6,892 | 6,974 | 7,051 | 7,123 | 7,194 | 7,266 | 7,339 | 7,412 | 7,486 |
| Supply and use (million hundredweight): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 20.1 | 23.2 | 38.6 | 39.6 | 34.6 | 30.0 | 25.7 | 25.1 | 24.6 | 24.3 | 24.1 | 24.2 |
| Production | 152.7 | 181.5 | 168.6 | 164.1 | 166.1 | 167.9 | 173.1 | 174.8 | 176.6 | 178.3 | 180.1 | 181.9 |
| Imports | 16.5 | 17.0 | 17.4 | 17.9 | 18.3 | 18.8 | 19.3 | 19.7 | 20.2 | 20.7 | 21.3 | 21.8 |
| Total supply | 189.3 | 221.6 | 224.6 | 221.6 | 219.0 | 216.7 | 218.1 | 219.6 | 221.4 | 223.3 | 225.5 | 227.9 |
| Domestic use \& residual | 90.8 | 99.0 | 100.0 | 101.0 | 102.0 | 103.0 | 104.0 | 105.0 | 106.1 | 107.2 | 108.3 | 109.4 |
| Exports | 75.4 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 | 90.0 | 91.0 | 92.0 | 93.0 | 94.0 |
| Total use | 166.2 | 183.0 | 185.0 | 187.0 | 189.0 | 191.0 | 193.0 | 195.0 | 197.1 | 199.2 | 201.3 | 203.4 |
| Ending stocks | 23.2 | 38.6 | 39.6 | 34.6 | 30.0 | 25.7 | 25.1 | 24.6 | 24.3 | 24.1 | 24.2 | 24.5 |
| Stocks/use ratio, percent | 13.9 | 21.1 | 21.4 | 18.5 | 15.9 | 13.5 | 13.0 | 12.6 | 12.3 | 12.1 | 12.0 | 12.0 |
| Price (dollars per hundredweight): |  |  |  |  |  |  |  |  |  |  |  |  |
| Average farm price | 12.80 | 11.00 | 10.75 | 10.45 | 10.59 | 10.98 | 11.19 | 11.47 | 11.81 | 12.03 | 12.26 | 12.47 |


| MEDIUM \& SHORT GRAIN |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area (thous and acres): |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted | 845 | 806 | 800 | 800 | 815 | 830 | 840 | 850 | 860 | 860 | 860 | 860 |
| Harvested | 838 | 802 | 795 | 795 | 810 | 825 | 835 | 845 | 855 | 855 | 855 | 855 |
| Yields (lbs per acre): |  |  |  |  |  |  |  |  |  |  |  |  |
| Yield/harvested acre | 8,010 | 7,495 | 8,050 | 8,090 | 8,129 | 8,168 | 8,208 | 8,248 | 8,289 | 8,330 | 8,372 | 8,414 |
| Supply and use (million hundredweight): |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 8.0 | 12.1 | 9.7 | 9.8 | 9.8 | 9.9 | 10.2 | 10.2 | 10.5 | 11.1 | 11.1 | 11.1 |
| Production | 67.1 | 60.1 | 64.0 | 64.3 | 65.8 | 67.4 | 68.5 | 69.7 | 70.9 | 71.2 | 71.6 | 71.9 |
| Imports | 2.5 | 2.5 | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 |
| Total supply | 78.7 | 74.7 | 76.3 | 76.8 | 78.4 | 80.2 | 81.7 | 83.0 | 84.6 | 85.6 | 86.1 | 86.5 |
| Domestic use \& residual | 31.8 | 30.0 | 30.5 | 31.0 | 31.5 | 32.0 | 32.5 | 33.0 | 33.5 | 34.0 | 34.5 | 35.0 |
| Exports | 34.8 | 35.0 | 36.0 | 36.0 | 37.0 | 38.0 | 39.0 | 39.5 | 40.0 | 40.5 | 40.5 | 40.5 |
| Total use | 66.6 | 65.0 | 66.5 | 67.0 | 68.5 | 70.0 | 71.5 | 72.5 | 73.5 | 74.5 | 75.0 | 75.5 |
| Ending stocks | 12.1 | 9.7 | 9.8 | 9.8 | 9.9 | 10.2 | 10.2 | 10.5 | 11.1 | 11.1 | 11.1 | 11.0 |
| Stocks/use ratio, percent | 18.1 | 14.9 | 14.7 | 14.6 | 14.4 | 14.6 | 14.3 | 14.5 | 15.1 | 14.9 | 14.8 | 14.6 |
| Price (dollars per hundred Average farm price | 17.70 | 17.80 | 17.40 | 16.37 | 16.31 | 16.34 | 16.50 | 16.53 | 16.55 | 16.62 | 16.85 | 17.16 |

Table 26. U.S. upland cotton long-term projections

| Item | 2009/10 | 2010/11 | 2011/12 | $2012 / 13$ | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ | $2017 / 18$ | $2018 / 19$ | $2019 / 20$ | $2020 / 21$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 27. U.S. sugar long-term projections

| Item | Units | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sugarbeets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Planted area | 1,000 acres | 1,186 | 1,183 | 1,186 | 1,100 | 1,107 | 1,119 | 1,121 | 1,119 | 1,115 | 1,110 | 1,106 | 1,102 |
| Harvested area | 1,000 acres | 1,149 | 1,154 | 1,138 | 1,055 | 1,062 | 1,073 | 1,075 | 1,073 | 1,069 | 1,065 | 1,060 | 1,057 |
| Yield | Tons/acre | 25.7 | 27.7 | 26.1 | 26.3 | 26.4 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 26.9 |
| Production | Mil. s. tons | 29.6 | 31.9 | 29.7 | 27.7 | 28.0 | 28.3 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 |
| Sugarcane |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Harvested area | 1,000 acres | 812 | 819 | 818 | 815 | 815 | 816 | 816 | 816 | 816 | 816 | 816 | 816 |
| Yield | Tons/acre | 34.8 | 33.6 | 34.1 | 34.2 | 34.4 | 34.6 | 34.8 | 34.9 | 35.1 | 35.3 | 35.5 | 35.7 |
| Production | Mil. s. tons | 28.3 | 27.5 | 27.8 | 27.9 | 28.0 | 28.2 | 28.4 | 28.5 | 28.7 | 28.8 | 29.0 | 29.1 |
| Supply: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning stocks | 1,000 s. tons | 1,534 | 1,501 | 1,265 | 1,522 | 1,564 | 1,578 | 1,591 | 1,603 | 1,616 | 1,629 | 1,641 | 1,652 |
| Production | 1,000 s. tons | 7,967 | 8,230 | 8,321 | 8,013 | 8,098 | 8,201 | 8,268 | 8,313 | 8,349 | 8,385 | 8,418 | 8,457 |
| Beet sugar | 1,000 s. tons | 4,575 | 4,800 | 4,845 | 4,525 | 4,589 | 4,668 | 4,712 | 4,735 | 4,749 | 4,764 | 4,775 | 4,793 |
| Cane sugar | 1,000 s. tons | 3,392 | 3,430 | 3,476 | 3,488 | 3,510 | 3,533 | 3,556 | 3,578 | 3,600 | 3,621 | 3,643 | 3,664 |
| Total imports | 1,000 s. tons | 3,320 | 2,744 | 3,208 | 3,613 | 3,607 | 3,597 | 3,622 | 3,670 | 3,726 | 3,783 | 3,831 | 3,886 |
| TRQ imports | 1,000 s. tons | 1,854 | 1,409 | 1,409 | 1,415 | 1,417 | 1,420 | 1,422 | 1,427 | 1,430 | 1,432 | 1,435 | 1,436 |
| Mexico | 1,000 s. tons | 807 | 1,025 | 1,474 | 1,873 | 1,865 | 1,852 | 1,874 | 1,918 | 1,972 | 2,026 | 2,071 | 2,125 |
| Other imports | 1,000 s. tons | 658 | 310 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 | 325 |
| Total supply | 1,000 s. tons | 12,821 | 12,475 | 12,794 | 13,148 | 13,269 | 13,376 | 13,480 | 13,586 | 13,691 | 13,797 | 13,890 | 13,995 |
| Use: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports | 1,000 s. tons | 211 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| Domestic deliveries | 1,000 s. tons | 11,133 | 11,060 | 11,122 | 11,434 | 11,541 | 11,635 | 11,727 | 11,820 | 11,913 | 12,006 | 12,088 | 12,181 |
| Miscellaneous | 1,000 s. tons | -22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total use | 1,000 s. tons | 11,321 | 11,210 | 11,272 | 11,584 | 11,691 | 11,785 | 11,877 | 11,970 | 12,063 | 12,156 | 12,238 | 12,331 |
| CCC surplus disbursements ${ }^{1}$ | 1,000 s. tons | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ending stocks | 1,000 s. tons | 1,501 | 1,265 | 1,522 | 1,564 | 1,578 | 1,591 | 1,603 | 1,616 | 1,629 | 1,641 | 1,652 | 1,665 |
| Raw sugar price: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New York (No. 16) | Cents/lb. | 35.36 | 23.99 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 | 22.92 |
| Raw sugar loan rate | Cents/lb. | 18.25 | 18.50 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 | 18.75 |
| Beet sugar loan rate | Cents/lb. | 23.45 | 23.77 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 | 24.09 |
| Grower prices: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sugarbeets | Dol./ton | 46.70 | 48.86 | 41.83 | 41.09 | 41.09 | 41.09 | 41.09 | 41.09 | 41.09 | 41.09 | 41.09 | 41.09 |
| Sugarcane | Dol./ton | 34.59 | 30.87 | 29.54 | 29.49 | 29.51 | 29.53 | 29.55 | 29.57 | 29.59 | 29.61 | 29.63 | 29.65 |

Note: Marketing year beginning October 1 for sugar.
$1 /$ CCC is the Commodity Credit Corporation, U.S. Department of Agriculture.

| Item | Unit | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Production area ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit, nuts, and vegetables | 1,000 acres | 10,827 | 10,931 | 10,974 | 11,018 | 11,064 | 11,111 | 11,159 | 11,209 | 11,261 | 11,314 | 11,368 | 11,424 |
| Fruit and tree nuts | 1,000 acres | 3,987 | 3,990 | 3,993 | 3,996 | 4,000 | 4,005 | 4,010 | 4,015 | 4,021 | 4,028 | 4,034 | 4,042 |
| Vegetables and melons | 1,000 acres | 6,840 | 7,100 | 6,650 | 6,850 | 7,064 | 7,106 | 7,150 | 7,194 | 7,240 | 7,286 | 7,334 | 7,383 |
| Supply |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Production, farm w eight |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit and nuts | Mill Ibs. | 63,954 | 62,502 | 64,523 | 64,666 | 64,816 | 64,972 | 65,134 | 65,303 | 65,479 | 65,661 | 65,850 | 66,045 |
| Citrus | Mil. Ibs. | 23,678 | 21,856 | 23,502 | 23,267 | 23,034 | 22,804 | 22,576 | 22,350 | 22,127 | 21,905 | 21,686 | 21,469 |
| Noncitrus | Mil. Ibs. | 36,258 | 36,548 | 36,840 | 37,135 | 37,432 | 37,732 | 38,034 | 38,338 | 38,645 | 38,954 | 39,265 | 39,579 |
| Tree nuts | Mil. Ibs. | 4,018 | 4,098 | 4,180 | 4,264 | 4,349 | 4,436 | 4,525 | 4,615 | 4,708 | 4,802 | 4,898 | 4,996 |
| Vegetables and melons ${ }^{2}$ | Mill Ibs. | 140,552 | 138,832 | 138,718 | 139,889 | 141,078 | 142,286 | 143,513 | 144,760 | 146,028 | 147,316 | 148,626 | 149,958 |
| Fresh market | Mil. Ibs. | 58,662 | 56,850 | 59,602 | 60,261 | 60,934 | 61,622 | 62,325 | 63,043 | 63,777 | 64,527 | 65,293 | 66,077 |
| Processing | Mill Ibs. | 41,581 | 38,633 | 38,864 | 39,098 | 39,332 | 39,568 | 39,806 | 40,045 | 40,285 | 40,526 | 40,770 | 41,014 |
| Potatoes | Mil. Ibs. | 35,349 | 33,000 | 35,108 | 35,284 | 35,460 | 35,638 | 35,816 | 35,995 | 36,175 | 36,356 | 36,537 | 36,720 |
| Pulses | Mil. Ibs. | 4,959 | 5,475 | 5,143 | 5,246 | 5,351 | 5,458 | 5,567 | 5,678 | 5,792 | 5,908 | 6,026 | 6,146 |
| Total fruit, nuts, vegetables | Mill Ibs. | 204,506 | 201,334 | 203,241 | 204,555 | 205,893 | 207,258 | 208,648 | 210,064 | 211,507 | 212,977 | 214,476 | 216,003 |
| Imports, farm w eight |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit, nuts, and vegetables | Mil. Ibs. | 59,894 | 64,931 | 66,487 | 68,148 | 69,852 | 71,601 | 73,395 | 75,236 | 77,124 | 79,062 | 81,050 | 83,090 |
| Fruit and tree nuts | Mil. Ibs. | 36,952 | 39,520 | 40,314 | 41,164 | 42,032 | 42,918 | 43,822 | 44,746 | 45,690 | 46,653 | 47,637 | 48,641 |
| Vegetables \& melons | Mil. Ibs. | 22,941 | 25,411 | 26,173 | 26,984 | 27,821 | 28,683 | 29,572 | 30,489 | 31,434 | 32,409 | 33,414 | 34,449 |
| Use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports, farm w eight |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit, nuts, and vegetables | Mil. Ibs. | 33,409 | 34,899 | 35,323 | 35,753 | 36,189 | 36,633 | 37,083 | 37,540 | 38,004 | 38,476 | 38,955 | 39,441 |
| Fruit and tree nuts | Mil. Ibs. | 13,577 | 14,325 | 14,440 | 14,557 | 14,675 | 14,796 | 14,918 | 15,043 | 15,170 | 15,299 | 15,430 | 15,564 |
| Vegetables \& melons | Mil. Ibs. | 19,833 | 20,574 | 20,883 | 21,196 | 21,514 | 21,837 | 22,164 | 22,497 | 22,834 | 23,177 | 23,525 | 23,877 |
| Domestic use ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit, nuts, and vegetables | Mill Ibs. | 222,423 | 222,827 | 226,045 | 228,480 | 230,973 | 233,527 | 236,143 | 238,821 | 241,565 | 244,375 | 247,253 | 250,201 |
| Fruit and tree nuts | Mil. Ibs. | 94,300 | 94,697 | 97,612 | 98,558 | 99,529 | 100,524 | 101,544 | 102,589 | 103,661 | 104,758 | 105,882 | 107,033 |
| Vegetables \& melons | Mil. Ibs. | 128,123 | 128,130 | 128,433 | 129,921 | 131,444 | 133,003 | 134,599 | 136,232 | 137,905 | 139,617 | 141,371 | 143,168 |
| Farm sales value ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit and nuts | \$ Mil. | 18,965 | 19,320 | 19,696 | 20,043 | 20,397 | 20,760 | 21,132 | 21,512 | 21,900 | 22,298 | 22,705 | 23,121 |
| Citrus | \$ Mil. | 2,845 | 2,859 | 2,888 | 2,879 | 2,870 | 2,862 | 2,853 | 2,845 | 2,836 | 2,828 | 2,819 | 2,811 |
| Noncitrus | \$ Mil. | 11,944 | 12,185 | 12,404 | 12,628 | 12,855 | 13,086 | 13,322 | 13,562 | 13,806 | 14,054 | 14,307 | 14,565 |
| Tree nuts | \$ Mil. | 4,151 | 4,276 | 4,404 | 4,536 | 4,672 | 4,812 | 4,957 | 5,105 | 5,258 | 5,416 | 5,579 | 5,746 |
| Vegetables and melons | \$ Mil. | 21,554 | 21,783 | 22,153 | 22,530 | 22,913 | 23,303 | 23,700 | 24,104 | 24,515 | 24,933 | 25,359 | 25,793 |
| Fresh market | \$ Mil. | 13,394 | 13,518 | 13,709 | 13,903 | 14,099 | 14,298 | 14,500 | 14,704 | 14,912 | 15,122 | 15,335 | 15,551 |
| Processing | \$ Mil. | 3,635 | 3,683 | 3,765 | 3,848 | 3,933 | 4,020 | 4,109 | 4,200 | 4,293 | 4,388 | 4,484 | 4,583 |
| Potatoes | \$ Mil. | 3,396 | 3,430 | 3,496 | 3,562 | 3,630 | 3,699 | 3,769 | 3,840 | 3,913 | 3,988 | 4,064 | 4,141 |
| Pulses | \$ Mil. | 1,129 | 1,151 | 1,184 | 1,217 | 1,251 | 1,286 | 1,322 | 1,359 | 1,397 | 1,436 | 1,476 | 1,518 |
| Nursery and greenhouse ${ }^{5}$ | \$ Mil. | 15,915 | 16,026 | 16,154 | 16,283 | 16,414 | 16,545 | 16,677 | 16,811 | 16,945 | 17,081 | 17,217 | 17,355 |
| Other horticulture crops ${ }^{6}$ | \$ Mil. | 859 | 875 | 899 | 925 | 950 | 977 | 1,004 | 1,033 | 1,061 | 1,091 | 1,122 | 1,153 |
| Total horticulture crops | \$ Mil. | 57,294 | 58,003 | 58,902 | 59,780 | 60,674 | 61,585 | 62,513 | 63,459 | 64,422 | 65,403 | 66,403 | 67,422 |
| Producer prices ${ }^{7}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fresh fruits | 1982=100 | 110.4 | 122.2 | 120.7 | 122.5 | 124.4 | 126.3 | 128.3 | 130.2 | 132.2 | 134.3 | 136.3 | 138.4 |
| Citrus | 1982=100 | 164.3 | 167.0 | 159.9 | 164.0 | 168.1 | 172.3 | 176.6 | 180.8 | 185.1 | 189.4 | 193.7 | 198.1 |
| Noncitrus | 1982=100 | 107.6 | 123.5 | 124.7 | 126.0 | 127.2 | 128.5 | 129.7 | 131.0 | 132.3 | 133.6 | 135.0 | 136.3 |
| Tree nuts | 1982=100 | 808.9 | 836.0 | 844.2 | 852.5 | 860.8 | 869.3 | 877.8 | 886.4 | 895.1 | 903.9 | 912.7 | 921.7 |
| Vegetables | 1982=100 | 162.2 | 181.7 | 184.9 | 186.5 | 188.1 | 189.7 | 191.2 | 192.8 | 194.4 | 196.0 | 197.6 | 199.2 |
| Fresh vegetables | 1982=100 | 169.4 | 195.0 | 183.3 | 186.9 | 190.4 | 193.9 | 197.5 | 201.0 | 204.5 | 207.9 | 211.4 | 214.8 |
| Potatoes (fresh) | 1982=100 | 155.7 | 137.0 | 137.2 | 139.1 | 141.1 | 143.0 | 145.0 | 147.0 | 149.1 | 151.2 | 153.3 | 155.4 |
| Pulses (dried) | 1982=100 | 156.6 | 145.0 | 158.7 | 175.0 | 176.4 | 177.8 | 179.2 | 180.6 | 182.0 | 183.4 | 184.8 | 186.3 |
| Fruit, nuts, and vegetables | 1982=100 | 146.7 | 162.3 | 163.7 | 165.5 | 167.2 | 169.0 | 170.8 | 172.6 | 174.5 | 176.3 | 178.2 | 180.0 |

1/Bearing acreage for fruit and nuts; harvested area for vegetables. 2/ Utilized production is used for potatoes. Pulses include edible dry beans and peas, lentils, and other peas. $3 /$ In farm or fresh weight units. Stock changes are accounted for. 4/ Farm cash receipts for fresh and processing vegetables are allocated based on their relative production value shares. $5 /$ Includes floral crops, greenhouse vegetables such as tomatoes, cucumbers, sw eet and hot peppers, and fruit and vegetable transplants. 6/ Includes honey, maple syrup, hops, mint oils, taro, ginger root, and coffee from Haw aii and Puerto Rico. 7/ Not seasonally adjusted producer price indexes for farm commodities from U.S. Bureau of Labor Statistics. Prices for fresh fruits include melons.
Data sources: USDA, National Agricultural Statistics Service; Foreign Agricultural Service; Economic Research Service; U.S. Department of Labor, Bureau of Labor Statistics.

Table 29. Horticultural crops long-term export and import projections, fiscal years

| Item | Unit | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exports |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit and nuts |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fresh fruits | \$ Mil. | 3,522 | 3,799 | 4,082 | 4,273 | 4,429 | 4,589 | 4,756 | 4,929 | 5,108 | 5,293 | 5,485 | 5,684 |
| Citrus | \$ Mil. | 726 | 924 | 975 | 1,040 | 1,063 | 1,087 | 1,110 | 1,134 | 1,159 | 1,183 | 1,207 | 1,232 |
| Noncitrus | \$ Mil. | 2,795 | 2,874 | 3,107 | 3,234 | 3,366 | 3,503 | 3,646 | 3,794 | 3,949 | 4,110 | 4,278 | 4,452 |
| Processed fruits | \$ Mil. | 2,266 | 2,380 | 2,578 | 2,712 | 2,797 | 2,885 | 2,976 | 3,070 | 3,167 | 3,267 | 3,370 | 3,476 |
| Fruit juices | \$ Mil. | 1,107 | 1,152 | 1,180 | 1,209 | 1,239 | 1,269 | 1,300 | 1,332 | 1,364 | 1,398 | 1,432 | 1,467 |
| Tree nuts | \$ Mil. | 3,495 | 4,060 | 4,300 | 4,519 | 4,749 | 4,990 | 5,244 | 5,511 | 5,792 | 6,087 | 6,396 | 6,722 |
| Total fruit and nuts | \$ Mil. | 9,283 | 10,239 | 10,960 | 11,504 | 11,974 | 12,465 | 12,977 | 13,510 | 14,066 | 14,646 | 15,251 | 15,882 |
| Vegetables |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fresh | \$ Mil. | 1,892 | 2,060 | 2,118 | 2,184 | 2,252 | 2,322 | 2,394 | 2,469 | 2,546 | 2,625 | 2,707 | 2,791 |
| Processed ${ }^{1}$ | \$ Mil. | 3,113 | 3,233 | 3,322 | 3,423 | 3,526 | 3,634 | 3,744 | 3,858 | 3,975 | 4,095 | 4,220 | 4,348 |
| Total vegetables | \$ Mil. | 5,005 | 5,294 | 5,440 | 5,607 | 5,778 | 5,956 | 6,138 | 6,327 | 6,521 | 6,720 | 6,927 | 7,139 |
| Other horticulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nursery and greenhouse | \$ Mil. | 355 | 336 | 340 | 345 | 350 | 354 | 359 | 364 | 369 | 374 | 379 | 384 |
| Essential oils | \$ Mil. | 1,234 | 1,367 | 1,424 | 1,484 | 1,546 | 1,611 | 1,679 | 1,750 | 1,823 | 1,900 | 1,980 | 2,063 |
| Wine | \$ Mil. | 827 | 1,004 | 1,036 | 1,069 | 1,104 | 1,139 | 1,176 | 1,214 | 1,253 | 1,293 | 1,335 | 1,377 |
| Beer | \$ Mil. | 296 | 296 | 304 | 313 | 321 | 330 | 340 | 349 | 359 | 369 | 379 | 390 |
| Other ${ }^{2}$ | \$ Mil. | 3,636 | 4,076 | 4,796 | 4,997 | 5,206 | 5,424 | 5,651 | 5,887 | 6,132 | 6,387 | 6,652 | 6,928 |
| Total horticulture | \$ Mil. | 20,634 | 22,610 | 24,300 | 25,318 | 26,280 | 27,280 | 28,319 | 29,399 | 30,522 | 31,688 | 32,901 | 34,162 |
| Fresh produce ${ }^{3}$ | \$ Mil. | 5,414 | 5,859 | 6,200 | 6,457 | 6,681 | 6,912 | 7,150 | 7,398 | 7,654 | 7,918 | 8,192 | 8,475 |
| Processed produce ${ }^{3}$ | \$ Mil. | 5,379 | 5,613 | 5,900 | 6,134 | 6,324 | 6,519 | 6,720 | 6,928 | 7,142 | 7,362 | 7,589 | 7,824 |
| Imports |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fruit and nuts |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fresh fruits | \$ Mil. | 6,074 | 6,803 | 7,500 | 7,938 | 8,287 | 8,650 | 9,029 | 9,425 | 9,838 | 10,270 | 10,720 | 11,190 |
| Citrus | \$ Mil. | 442 | 464 | 500 | 527 | 549 | 571 | 594 | 618 | 644 | 670 | 697 | 725 |
| Noncitrus | \$ Mil. | 5,632 | 6,339 | 7,000 | 7,411 | 7,738 | 8,079 | 8,435 | 8,807 | 9,195 | 9,600 | 10,023 | 10,465 |
| Processed fruits | \$ Mil. | 3,375 | 3,276 | 3,500 | 3,682 | 3,826 | 3,976 | 4,131 | 4,293 | 4,461 | 4,635 | 4,816 | 5,004 |
| Fruit juices | \$ Mil. | 1,414 | 1,279 | 1,400 | 1,447 | 1,483 | 1,521 | 1,559 | 1,598 | 1,638 | 1,679 | 1,722 | 1,765 |
| Tree nuts | \$ Mil. | 1,151 | 1,332 | 1,500 | 1,559 | 1,619 | 1,683 | 1,748 | 1,817 | 1,888 | 1,961 | 2,038 | 2,118 |
| Total fruit and nuts | \$ Mil. | 10,601 | 11,411 | 12,500 | 13,179 | 13,732 | 14,309 | 14,909 | 15,535 | 16,187 | 16,866 | 17,574 | 18,312 |
| Vegetables |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fresh | \$ Mil. | 4,237 | 5,180 | 5,800 | 6,172 | 6,468 | 6,779 | 7,105 | 7,446 | 7,804 | 8,179 | 8,573 | 8,985 |
| Processed ${ }^{1}$ | \$ Mil. | 3,483 | 3,574 | 3,800 | 4,104 | 4,270 | 4,442 | 4,621 | 4,807 | 5,001 | 5,203 | 5,412 | 5,630 |
| Total vegetables | \$ Mil. | 7,720 | 8,754 | 9,600 | 10,276 | 10,738 | 11,221 | 11,726 | 12,254 | 12,805 | 13,382 | 13,985 | 14,615 |
| Other horticulture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nursery and greenhouse | \$ Mil. | 1,357 | 1,441 | 1,600 | 1,617 | 1,635 | 1,653 | 1,671 | 1,689 | 1,707 | 1,726 | 1,744 | 1,763 |
| Essential oils | \$ Mil. | 2,406 | 2,414 | 2,600 | 2,789 | 2,941 | 3,102 | 3,271 | 3,450 | 3,638 | 3,836 | 4,046 | 4,267 |
| Wine | \$ Mil. | 4,084 | 4,258 | 4,500 | 4,792 | 4,999 | 5,215 | 5,441 | 5,676 | 5,922 | 6,178 | 6,445 | 6,724 |
| Beer | \$ Mil. | 3,428 | 3,452 | 3,600 | 3,781 | 3,908 | 4,039 | 4,175 | 4,315 | 4,460 | 4,610 | 4,764 | 4,924 |
| Other ${ }^{2}$ | \$ Mil. | 3,421 | 3,820 | 4,100 | 4,407 | 4,604 | 4,809 | 5,023 | 5,247 | 5,481 | 5,725 | 5,981 | 6,247 |
| Total horticulture | \$ Mil. | 33,017 | 35,549 | 38,500 | 40,843 | 42,558 | 44,348 | 46,216 | 48,165 | 50,200 | 52,323 | 54,539 | 56,852 |
| Fresh produce ${ }^{3}$ | \$ Mil. | 10,311 | 11,983 | 13,300 | 14,110 | 14,755 | 15,429 | 16,134 | 16,872 | 17,643 | 18,449 | 19,293 | 20,175 |
| Processed produce ${ }^{3}$ | \$ Mil. | 6,859 | 6,850 | 7,300 | 7,787 | 8,096 | 8,418 | 8,752 | 9,100 | 9,462 | 9,838 | 10,229 | 10,635 |

$1 /$ Includes dry edible beans, peas, lentils, and potatoes. 2/ Includes hops, ginseng, sauces, condiments, mixed food, yeast, starches, and other products that contain horticulture ingredients. $3 /$ Includes fruits and vegetables only.
Exports are free alongside ship (FAS) value at U.S. port of exportation. Imports are customs value at U.S. port of entry.
Data source: U.S. Department of Commerce, Bureau of the Census.

